



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,674	12/27/2001	Charles D. Kowanacki	0115429-00140	7082
29180 7590 04/16/2008 BELF., BOYD, & LLOYD LLP P.O. BOX 1135 CHICAGO, IL 60690				
EXAMINER NGUYEN, HOANG M				
ART UNIT 3748		PAPER NUMBER		
MAIL DATE 04/16/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/026,674

Applicant(s)

KOWANACKI ET AL.

Examiner

Hoang M. Nguyen

Art Unit

3748

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 6-10 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, and 11-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

Applicant's amendment dated August 23, 2007, has been fully considered.

Applicant amended claim 9 to be dependent from claim 7. Accordingly, claim 9 has been allowed.

Applicant argued claim 5 is not indefinite, but a broad claim, and pointed out that the retaining means can be any other means beside the retaining cap in claim 4. It's noted that claim 5 is now broader than independent claim 4 and that is not permissible. Also, note there is only one retaining means in this invention which is cap 28. Therefore, the 112, 2nd rejections for claim 5 must be maintained for broadening the scope of the independent claim and claiming something that is not in the application.

Regarding claim 21, Applicant argued the housing 56 is the continuous piece as claimed. This argument is not acceptable because an engine cylinder is already recited. The chamber and the cylinder are two separate devices, and said continuous piece can not be from separate devices. Applicant may need to use the following language "the chamber is continuous with the cylinder".

Applicant amended the claims to include new limitations "the mouth including a first member upon the external surface of the mouth", "the internal air inlet including a second member, wherein if the mouth is positioned in the internal air inlet sufficiently far to position the first member interior of the second member", and argued the applied

Art Unit: 3748

references do not teach said new limitations. After carefully reviewing those limitations, it's noted that the limitations add new matter in this application and should be rejected under 35 USC 112, 1st paragraph. The mouth 29 has the threads surface which can be considered the first member. However, the intake manifold 18 has only an internal inlet 24 with valve 20 to regulate the flow, the inlet 24 has no element that can be considered as the second member so that the first member is interior of the second member as claimed. The only element that is outside of the mouth 29 is the retaining cap 28 but this cap is not part of the intake manifold. This is clearly new matter and indefinite. Because the limitations are not in the specification, they are given little weight and all rejections have been maintained.

Applicant argued Jacoby does not disclose a chamber with two channels. The Examiner strongly disagrees. Chamber 24 has two channels 32, 33, one is connected with the canister 38, and another channel connected with pump 40 is connected with the valve 44.

Applicant argued Jacoby does not disclose a piston cylinder assembly. The Examiner strongly disagrees because the projectile 22 is a piston inside cylinder 14.

The application has been rejected as follows.

Claims 1-3, 11-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As clearly set forth above, Applicant amended the claims to include new limitations "the mouth including a first member upon the external surface of the mouth", "the internal air inlet including a second member, wherein if the mouth is positioned in the internal air inlet sufficiently far to position the first member interior of the second member", and argued the applied references do not teach said new limitations. After carefully reviewing those limitations, it's noted that the limitations add new matter in this application and should be rejected under 35 USC 112, 1st paragraph. The mouth 29 has the threads surface which can be considered the first member. However, the intake manifold 18 has only an internal inlet 24 with valve 20 to regulate the flow, the inlet 24 has no element that can be considered as the second member so that the first member is interior of the second member as claimed. The only element that is outside of the mouth 29 is the retaining cap 28 but this cap is not part of the intake manifold.

Claims 1-3, 5, 11-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the independent claims 1, 11, 16, the new limitations "the mouth including a first member upon the external surface of the mouth", "the internal air inlet including a second member, wherein if the mouth is positioned in the internal air inlet sufficiently far to position the first member interior of the second member" are vague and indefinite because those limitations are not in the specification. Please point out.

In claim 5, it's improper to recite a retaining means that is broader than the independent claim.

In claim 21, it's unclear which continuous piece of material Applicant recites. The manifold 18 is not part of the engine cylinder.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 11-13, 16-18, as best understood and as far as definite, are rejected under 35 U.S.C. 102(b) as being anticipated by US 4162614 (Holleyman).

Holleyman discloses an air engine comprising many cylinders, an inlet manifold 38 being rigidly and directed connected with said cylinders and a rechargeable air canister 28, said canister 28 having an inlet check valve 36 to recharge air into the tank, the manifold 38 having regulator valves 40 for controlling the air input into the engine. The new limitations are given little weights because they are new matter and indefinite.

Claims 1, 3, 11-13, 16-18, as best understood and as far as definite, are rejected under 35 U.S.C. 102(b) as being anticipated by US 819653 (Hawke).

Hawke discloses an air engine comprising a cylinder 12, an inlet manifold 14 being rigidly and directly connected with said cylinder and a rechargeable air canister 2, said canister 2 having a pump to recharge air into the tank, the manifold 14 having regulator valve 15 for controlling the air input into the engine. Please note the inlet manifold of this invention is simply a pipe; therefore, the pipe 14 in Hawke can be used to meet the claimed chamber/manifold. The new limitations are given little weights because they are new matter and indefinite.

Claims 21-26, as best understood and as far as definite, are rejected under 35 U.S.C. 102(b) as being anticipated by US 4159705 (Jacoby).

Jacoby discloses an air engine comprising a cylinder 15 and a piston 22, an inlet manifold 16 being rigidly and directly connected with said cylinder and a rechargeable air canister 38, a chamber 24 of the manifold 16 having two channels forming two inlets connected with said air canister 38 and a hand pump 40 to recharge air into the tank, the manifold 16 having regulator valve 48 for controlling the air input into the engine. Please note manifold 16 is continuous material and forms a part of the cylinder 15.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 11-26, as best understood and as far as definite, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4614085 (Neukomm) in view of U.S. 4329806 (Akiyama et al). Neukomm discloses a pneumatic engine comprising an inflatable compressed gas canister 13, an inlet manifold (crankshaft housing 4) for rigidly and directly connected with said canister and cylinder, a means including a valve 17 and a check valve 9 which can be open to allow a continuous flow of air from the canister to the engine. Neukomm does not disclose 1) air is the working fluid, and 2) the air canister is rechargeable in working position. Akiyama et al discloses a pneumatic engine comprising a rechargeable canister 20, an engine cylinder 12, a valve 90, the chamber formed by reference numeral 46 clearly has two channels, one channel 42 is connected with the canister 20, and a second channel 48 being connected to said valve, and also a third channel 64 is also connected to said valve 90. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use air as the working fluid in Neukomm as taught by Akiyama for the purpose of achieving appropriate work output and because air is a less expensive source of energy, and the valves having two channels in Neukomm as taught by Akiyama et al for the purpose of being able to recharge the air canister during operating condition. The new limitations are given little weights because they are new matter and indefinite.

Claims 4, 6-10, are allowed.

Claim 5 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3748

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoang M Nguyen/
Primary Examiner, Art Unit 3748

HOANG NGUYEN
PRIMARY EXAMINER
ART UNIT 3748

Hoang Minh Nguyen